

In the Claims:

Please amend the claims as follows:

Claim 1 (Currently amended) A sub-sea controller (31) located under the sea level for managing a plurality of tools in a sub-sea well installation, the sub-sea controller (31) comprising:

downloading means to download an application module (35_a) to the sub-sea controller (31); and
a virtual machine (36) to execute the downloaded application module (35_a).

Claim 2 (Currently amended) The sub-sea controller (412) according to claim 1, further comprising:

a native application (47) implemented within the sub-sea controller (412); and
a native interface (48) implemented within the sub-sea controller (412), the native interface (48) enabling the application module (45_a) to access the native application (47).

Claim 3 (Currently amended) The sub-sea controller (412) according to claim 2, wherein the native interface (48) enables the native application (47) to access the application module (45_a).

Claim 4 (Currently amended) The sub-sea controller (412) according to ~~any one of claims 2 or 3~~ claim 2, further comprising:

a native memory wherein the native application (47) is executed; and
a defined memory wherein the application module (45_a) is executed, the defined memory being distinct from the native memory.

Claim 5 (Currently amended) The sub-sea controller (412) according to ~~any one of claims 2 to 4~~ claim 2, further comprising:

a protection register, the protection register authorizing an access to the native application only if a key code is written hereinto;

accessing means to access the protection register from the application module.

Claim 6 (Currently amended) The sub-sea controller (45_a) according to any one of claims 1 to 5 of claim 1 wherein the application module (45_a) contains a driver for a tool.

Claim 7 (Currently amended) A sub-sea well installation comprising a sub-sea controller (31) according to any one of claims 1 to 6 of claim 1.

Claim 8 (Currently amended) A method for updating a software of a sub-sea controller (31) located under the sea level, the sub-sea controller (31) managing a plurality of tools in a sub-sea well, the method comprising:

downloading an application module (35_a) into the sub-sea controller (31); and
executing the application module (35_a) using a virtual machine (36) implemented
within the sub-sea controller (31).

Claim 9 (Currently amended) The method according to claim 8, further comprising:
executing a native application (47) of the sub-sea controller (42) within the sub-
sea controller (412);
executing a native interface within the sub-sea controller (412);
accessing the native interface from the native application (47) to exchange data
with the application module (45_a).

Claim 10 (Currently amended) The method according to claim 8, further comprising:
executing a native application (47) of the sub-sea controller (42) within the sub-
sea controller (412);
executing a native interface within the sub-sea controller (412);
accessing the native interface from the application module (45_a) to exchange data
with the native application (47).

Claim 11 (Currently amended) The method according to any one of claims 9 or 10 of claim 9, wherein the downloading and the executing of the application module (45_a) are

performed without interrupting an executing of the native application of the sub-sea controller (412).

Claim 12 (Currently amended) The method according to any one of claims 9 to 11 of claim 9, further comprising:

executing the application module (45_a) in a defined memory;
executing the native application (45_a) in a native memory;
wherein the defined memory is distinct from the native memory.

Claim 13 (Currently amended) The method according to anyone of claims 8 to 13 of claim 8 wherein the application module (45_a) contains a driver for a tool.